100

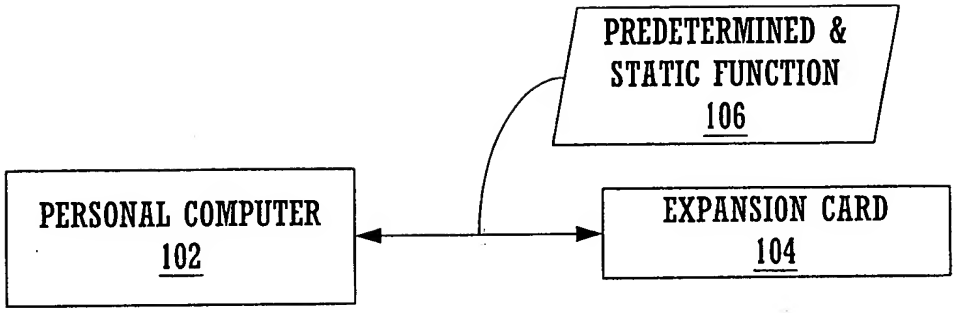

FIGURE 1
(Prior Art)

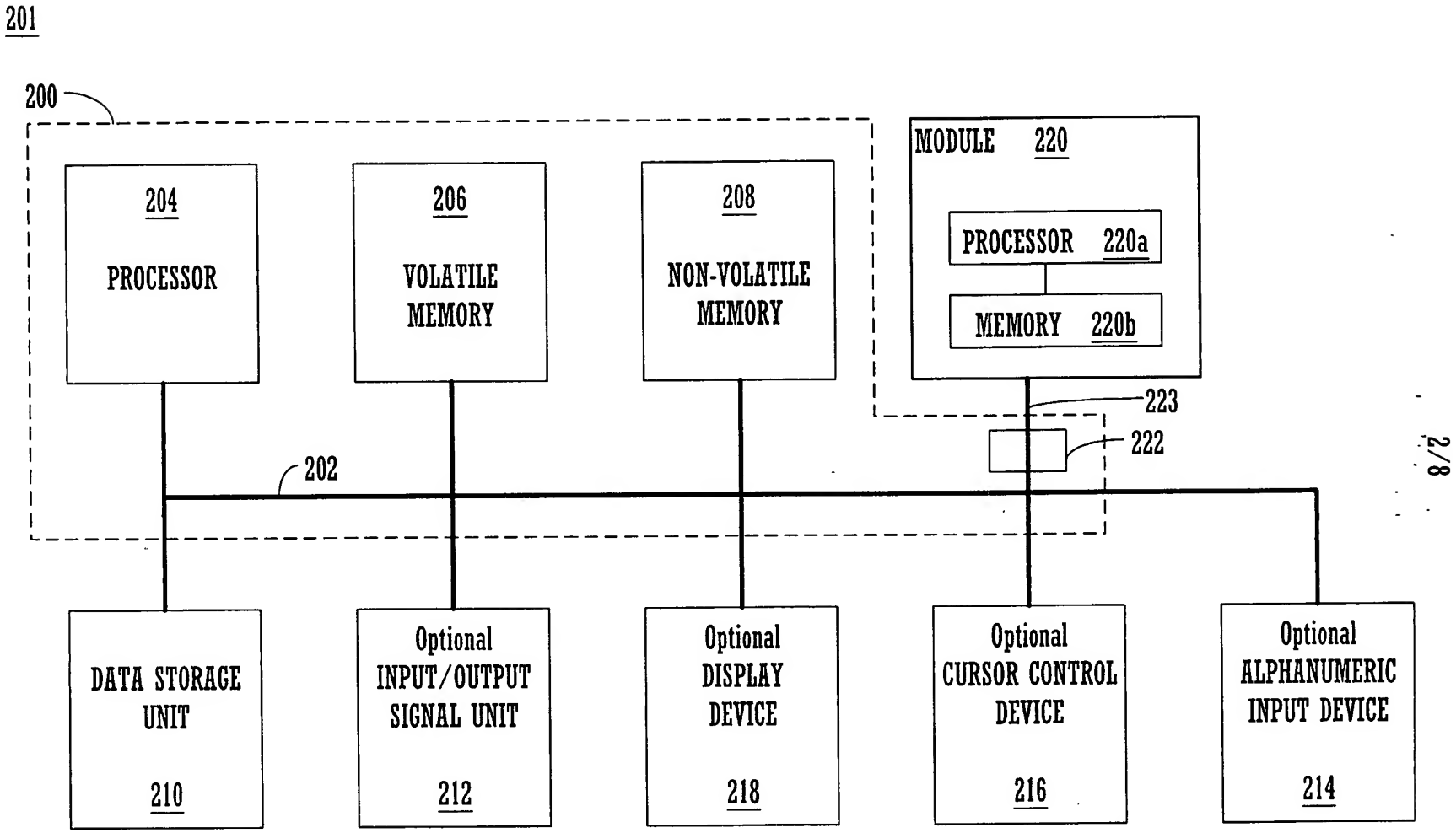
201
200
204
PROCESSOR
206
VOLATILE MEMORY
208
NON-VOLATILE MEMORY
MODULE 220
PROCESSOR 220a
MEMORY 220b
223
222
202
DATA STORAGE UNIT
210
Optional INPUT/OUTPUT SIGNAL UNIT
212
Optional DISPLAY DEVICE
218
Optional CURSOR CONTROL DEVICE
216
Optional ALPHANUMERIC INPUT DEVICE
214

FIGURE 2

300

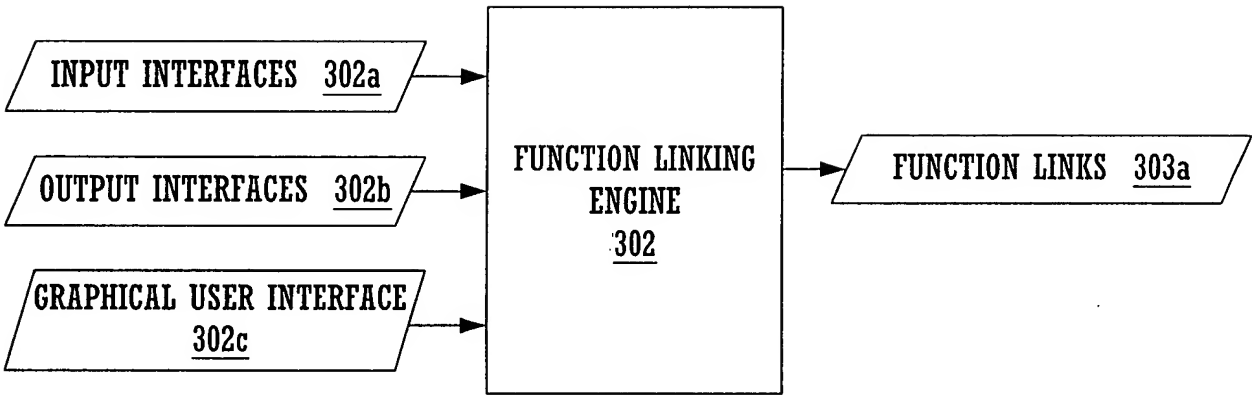

FIGURE 3A

320

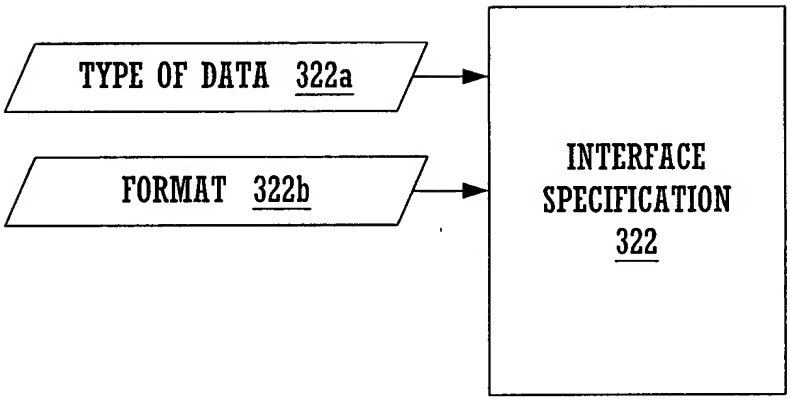

FIGURE 3B

400a

INPUT INTERFACE SPEC. (IIS) 401	FUNCTION (Fx) 402	OUTPUT INTERFACE SPEC. (OIS) 403

FIGURE 4A

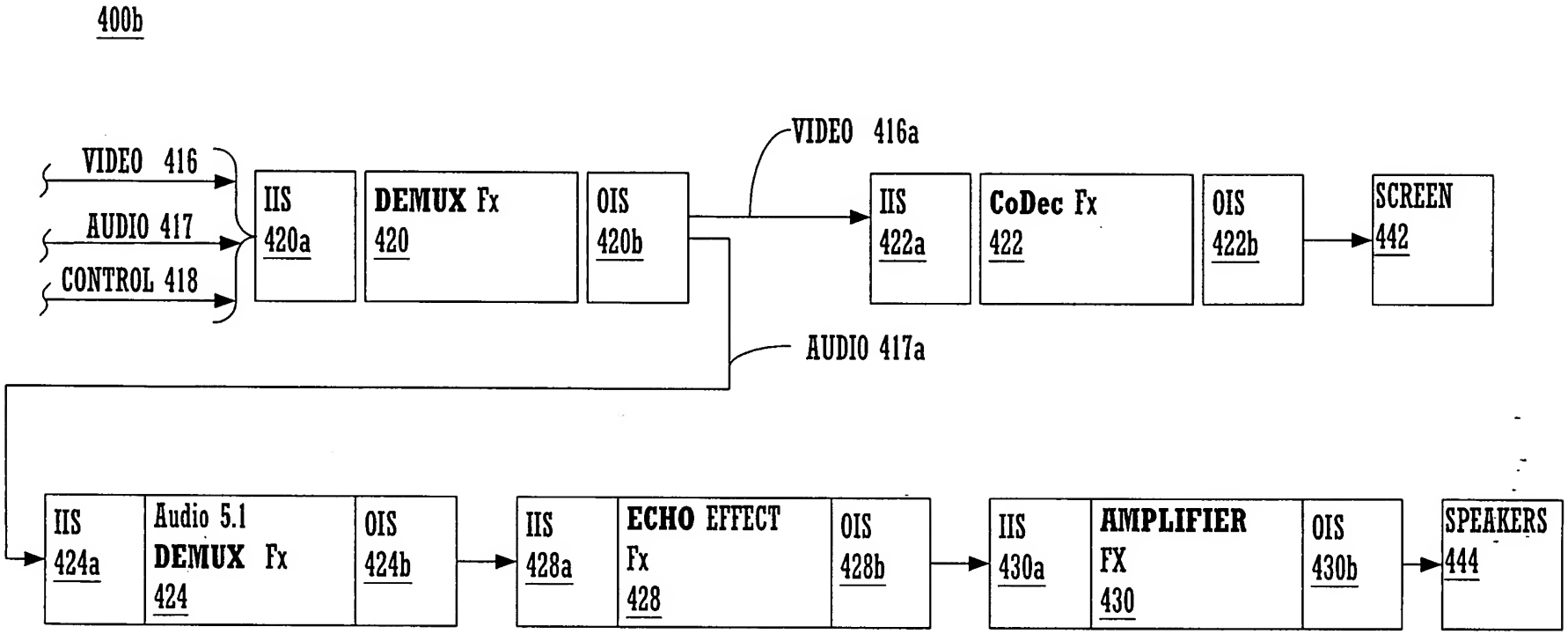
400b
VIDEO 416
AUDIO 417
CONTROL 418
IIS 420a
DEMUX Fx 420
OIS 420b
VIDEO 416a
IIS 422a
CoDec Fx 422
OIS 422b
SCREEN 442
AUDIO 417a
IIS 424a
Audio 5.1 DEMUX Fx 424
OIS 424b
IIS 428a
ECHO EFFECT Fx 428
OIS 428b
IIS 430a
AMPLIFIER FX 430
OIS 430b
SPEAKERS 444

FIGURE 4B

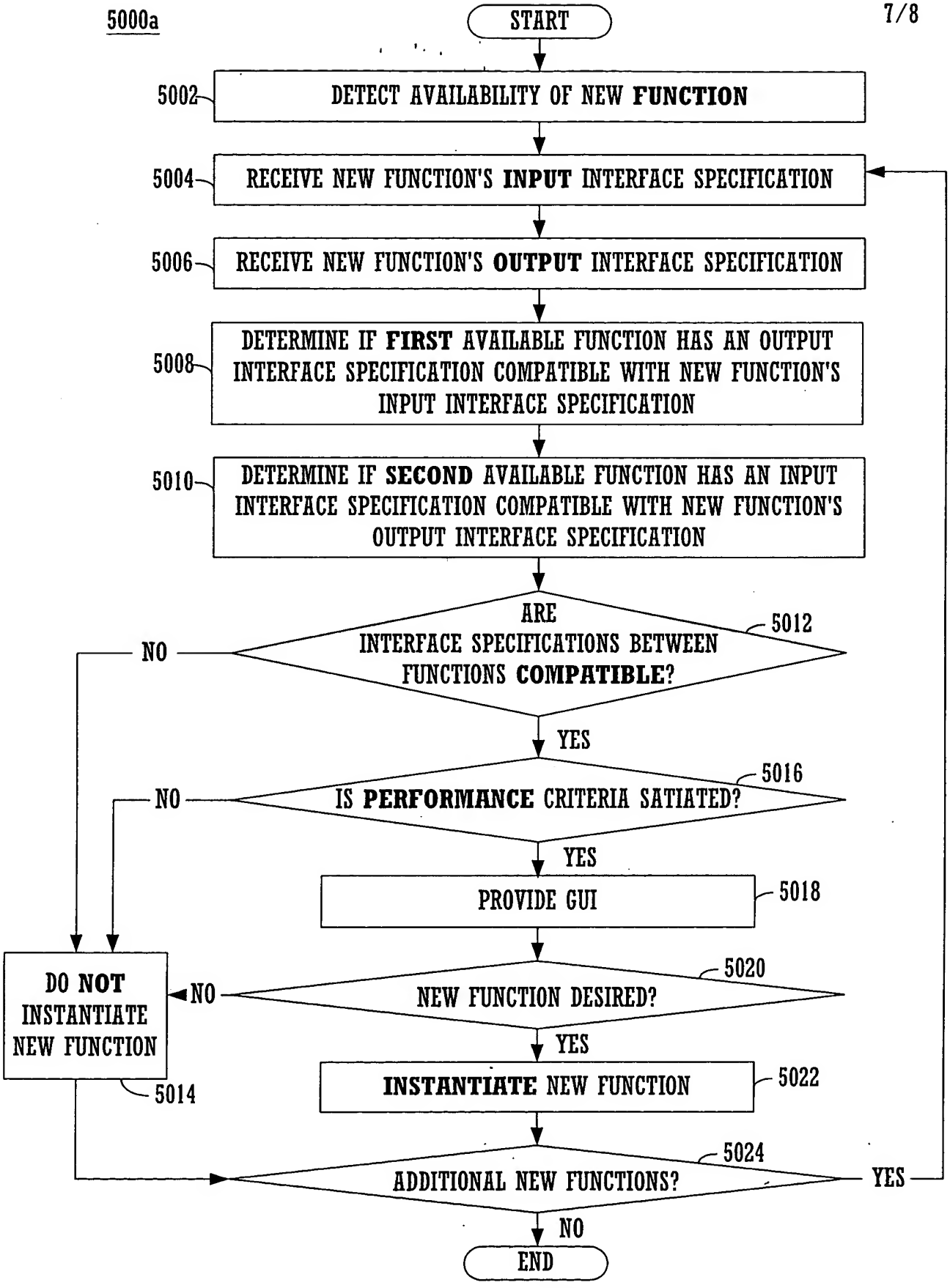
5000a
START
5002
DETECT AVAILABILITY OF NEW **FUNCTION**
5004
RECEIVE NEW FUNCTION'S **INPUT** INTERFACE SPECIFICATION
5006
RECEIVE NEW FUNCTION'S **OUTPUT** INTERFACE SPECIFICATION
5008
DETERMINE IF **FIRST** AVAILABLE FUNCTION HAS AN OUTPUT INTERFACE SPECIFICATION COMPATIBLE WITH NEW FUNCTION'S INPUT INTERFACE SPECIFICATION
5010
DETERMINE IF **SECOND** AVAILABLE FUNCTION HAS AN INPUT INTERFACE SPECIFICATION COMPATIBLE WITH NEW FUNCTION'S OUTPUT INTERFACE SPECIFICATION
5012
ARE INTERFACE SPECIFICATIONS BETWEEN FUNCTIONS **COMPATIBLE**?
NO
YES
5016
IS **PERFORMANCE** CRITERIA SATIATED?
NO
YES
5018
PROVIDE GUI
5020
NEW FUNCTION DESIRED?
NO
YES
DO **NOT** INSTANTIATE NEW FUNCTION
5014
5022
INSTANTIATE NEW FUNCTION
5024
ADDITIONAL NEW FUNCTIONS?
YES
NO
END

FIGURE 5A

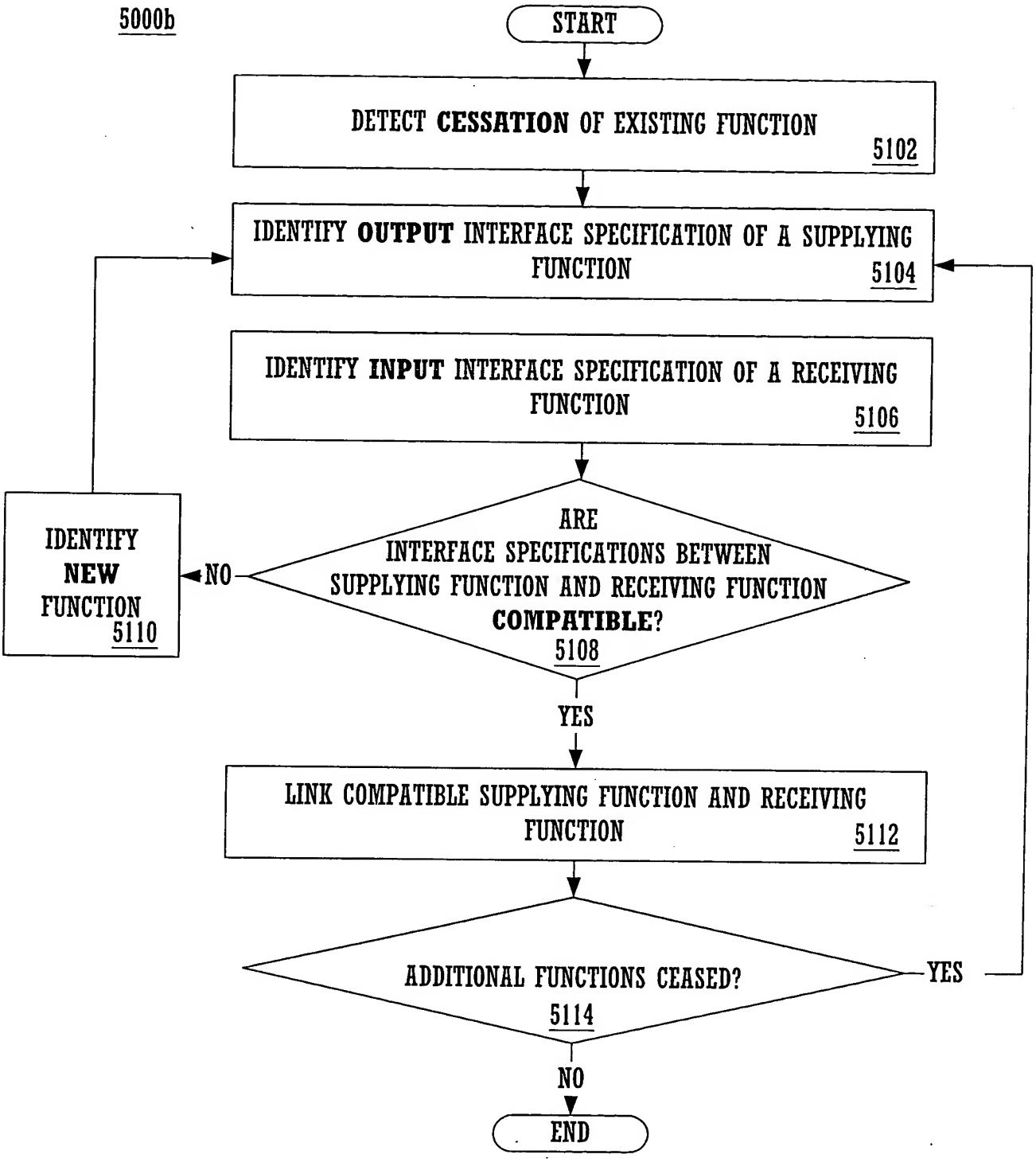
5000b
START
DETECT CESSATION OF EXISTING FUNCTION
5102
IDENTIFY OUTPUT INTERFACE SPECIFICATION OF A SUPPLYING FUNCTION
5104
IDENTIFY INPUT INTERFACE SPECIFICATION OF A RECEIVING FUNCTION
5106
ARE INTERFACE SPECIFICATIONS BETWEEN SUPPLYING FUNCTION AND RECEIVING FUNCTION COMPATIBLE?
5108
NO
IDENTIFY NEW FUNCTION
5110
YES
LINK COMPATIBLE SUPPLYING FUNCTION AND RECEIVING FUNCTION
5112
ADDITIONAL FUNCTIONS CEASED?
5114
YES
NO
END

FIGURE 5B